

Radon Tests - Medford Online Academy

#	Location/Type	Placement Description	Serial #	Dated Opened	Time Opened	Date Closed	Time Closed	Radon Test Results	Remarks
1	Lobby - Area A (South)	N.E. Desk	2765783	15-Sep-20	7:41 AM	17-Sep-20	8:29 AM	1.2	None.
2	Lobby - Area A - Duplicate	N.E. Desk	2765261	15-Sep-20	7:41 AM	17-Sep-20	8:29 AM	1.2	None.
3	Lobby - Area B (North)	S.E. File	2816031	15-Sep-20	7:42 AM	17-Sep-20	8:30 AM	0.8	None.
4	Lobby - Area B - Blank	S.E. File	2765635	15-Sep-20	7:42 AM	15-Sep-20	7:42 AM	0.1	None.
5	Office # 1	E. Wall	2816030	15-Sep-20	7:46 AM	17-Sep-20	8:31 AM	1.2	None.
6	Office # 2	E. Wall	2815947	15-Sep-20	7:52 AM	17-Sep-20	8:32 AM	0.9	None.
7	Office # 3	E. Wall	2765639	15-Sep-20	7:48 AM	17-Sep-20	8:33 AM	0.8	None.
8	Office # 4	E. Table	2765199	15-Sep-20	7:54 AM	17-Sep-20	8:44 AM	0.9	None.
9	Office # 5	N.E. File	2815477	15-Sep-20	7:55 AM	17-Sep-20	8:43 AM	0.9	None.
10	Office # 6	N. Counter	2765772	15-Sep-20	7:57 AM	17-Sep-20	8:34 AM	0.8	None.
11	Office # 7	N. Counter	2765645	15-Sep-20	8:00 AM	17-Sep-20	8:36 AM	0.2	None.
12	Office # 8	E. Wall	2765196	15-Sep-20	8:02 AM	17-Sep-20	8:36 AM	0.9	None.
13	Office # 9	S. Wall	2765193	15-Sep-20	8:04 AM	17-Sep-20	8:36 AM	0.7	None.

#	Type	Description	Serial #	Dated Opened	Time Opened	Date Closed	Time Closed	Radon Test Results	Remarks
14	Spike # 1 (Rm 300-A)	KSU Radon Chamber Spike to 22.9 pCi/L	2765798	14-Sep-20	9:30 AM	16-Sep-20	10:30 AM	22.4	Mountain Standard Time (MST)
15	Spike # 2 (Rm 300-B)	KSU Radon Chamber Spike to 22.9 pCi/L	2765780	14-Sep-20	10:30 AM	16-Sep-20	10:30 AM	20.0	Mountain Standard Time (MST)

*The E.P.A.'s recommended action level for radon is 4.0 pCi/L.

Two short-term tests taken in the lowest level of the building suitable for occupancy show radon levels that are equal to or greater than 4.0 pCi/L.

*This is not a health based number.

*Outdoor radon levels across the country average 0.4 pCi/L.

*If an RPD test result over 4.0 pCi/L differs by 28% or more, the data quality should be questioned.

*A trend in RPE values that are more than $\pm$ 30% should be investigated

Spike # 1	Test Results		RPD	Remarks
	Spiked Value	22.9	-2.18%	Expected Range
	Test Result	22.4		

Spike # 2	Test Results		RPD	Remarks
	Spiked Value	22.9	-12.66%	In Control
	Test Result	20		

RPE Formula
Relative Percent Error (RPE) = $\frac{\text{Measured Value} - \text{Reference Value}}{\text{Reference Value}} \times 100\%$

Expected Range	In Control	Warning	Out of Control
Between + 10% and - 10%	Between + 20% and - 20%	Between + 30% and - 30%	Outside + 30% and - 30%